

Energy & Geoscience Institute

Initiatives in India



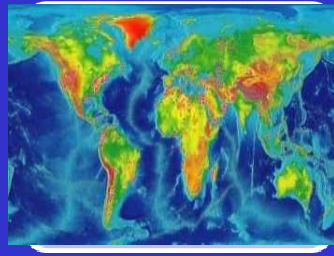
University of Utah

Salt Lake City

EGI

Houston Calgary London Bratislava Sydney Tripoli

3 Core EGI Research Programs



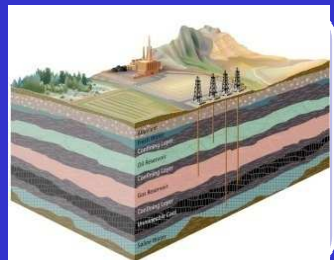
Fossil Energy

- Corporate Associates & Governments
- Exploration & Production – 62 countries



Geothermal Energy

- U.S. DOE & Industry
- Hydrothermal and Enhanced Systems



Carbon Engineering

- Climate Mitigation
- CO2 Storage & Sequestration

EGI History & Highlights

- Started 36 Years ago (1973) at 1st global oil shock
- Largest University based E&P consortia worldwide
- First U.S. Institute into Former Soviet Union (1986)
- 1st Univ. in post-sanction Libya for U.S. Dept. State
- Scientific lead for DOE National CO₂ partnership
- Worked all 7 continents and 62 countries
- Delivered more than \$350 Million in research

EGI

67 Energy Industry Corporate Associate Members 2008

Anadarko
Apache
AWE
Beach Petroleum
Benchmark
BG Group
BHP Billiton
BP
Cairn Energy
Centrica
Chesapeake Energy
Chief Oil & Gas
Chevron
Cobalt International
ConocoPhillips
Devon
DNO
EnCana
Eni
E.ON Ruhrgas
Frontera Resources
Gaz de France

Hess
Hunt Oil
Japex
Lukoil
Lundin
Maersk Oil
Marathon
Mitsui
Murphy Oil
Newfield
Nexen
Niko
Nippon
Noble Energy
Occidental
OMV
ONGC
Ophir Energy
Petrobras
Petronas
Petro-Canada
Petro-Hunt
Pioneer

Plains E&P
Premier Oil
Raser Technologies
Red Leaf
Reliance
Remora Energy
Repsol YPF
ROC Oil
RWE Dea
Santos
Samson
Shell
Sipetrol
Statoil-Hydro
Talisman
Teikoku Oil
Terralliance
TNK-BP
Total
Tullow
Wintershall
Woodside

EGI Staff from 16 Countries

Technical Staff From:

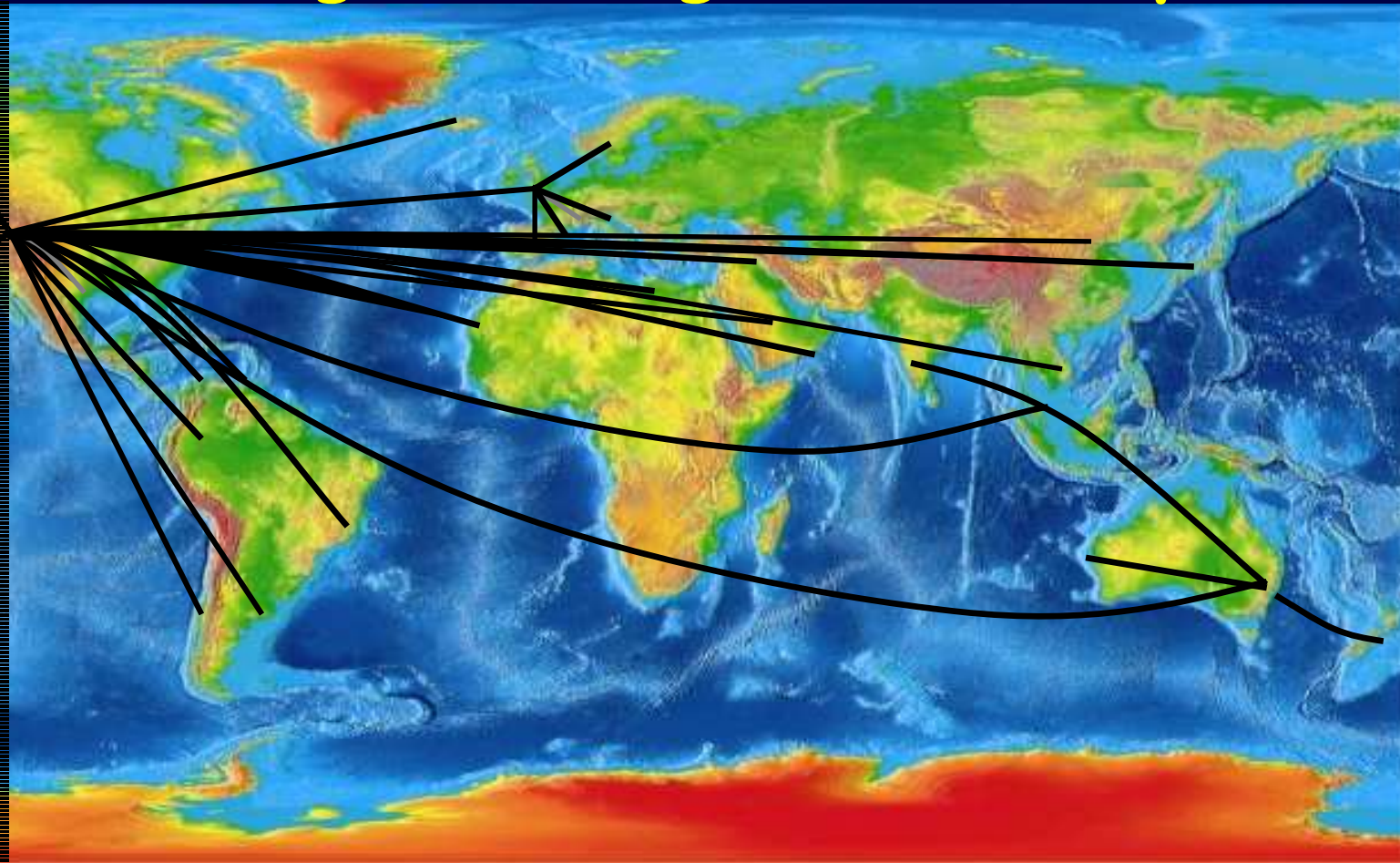
1. Australia
2. Canada
3. Chile
4. China
5. Germany
6. Hong Kong
7. India
8. Iran
9. Jordan
10. Korea
11. Poland
12. Romania
13. Slovakia
14. South Africa
15. United Kingdom
16. United States

Language Capability:

1. Arabic
2. Chinese
3. English
4. French
5. German
6. Hindi-Urdu
7. Italian
8. Japanese
9. Korean
10. Persian
11. Polish
12. Punjabi
13. Romanian
14. Russian
15. Slovak
16. Spanish
17. Turkish
18. Kannada
19. Telugu

EGI Scientist Travel Projects, Peer Assists, Training, Meetings, Workshops

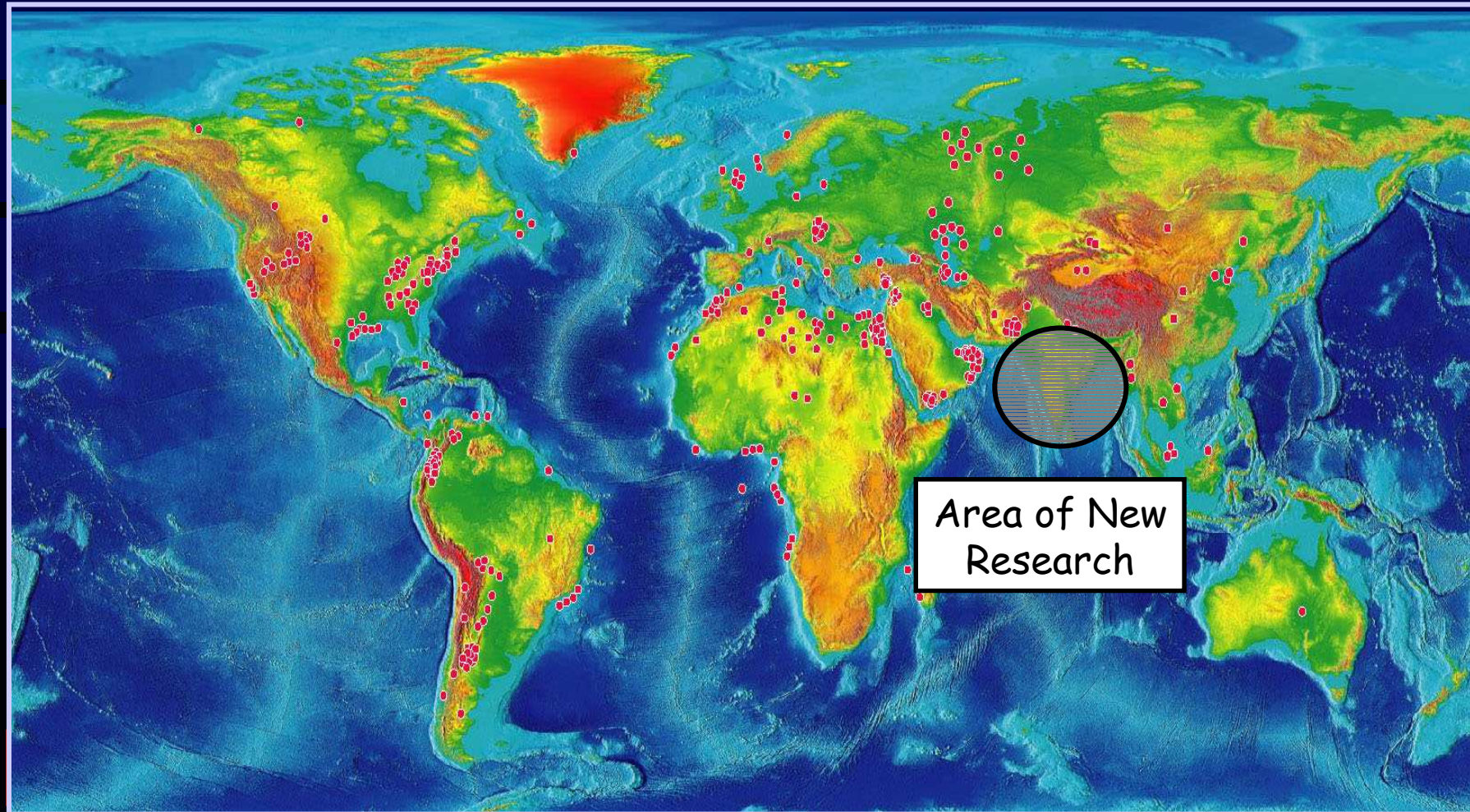
1. Argentina
2. Australia
3. Austria
4. Azerbaijan
5. Bulgaria
6. Brazil
7. Canada
8. Canary Islands
9. Chile
10. China
11. Czech Republic
12. Denmark
13. Egypt
14. Emirates
15. France
16. Georgia
17. Germany
18. Iceland
19. India
20. Iraq
21. Italy
22. Japan
23. Kazakhstan
24. Libya
25. Malaysia
26. Malta
27. Mexico
28. New Zealand
29. Norway
30. Oman
31. Philippines
32. U.K.
33. Romania
34. Russia
35. Senegal
36. Spain
37. Trinidad
38. Vietnam
39. Yemen



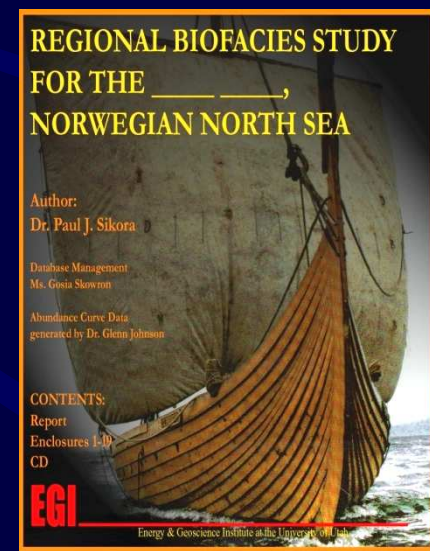
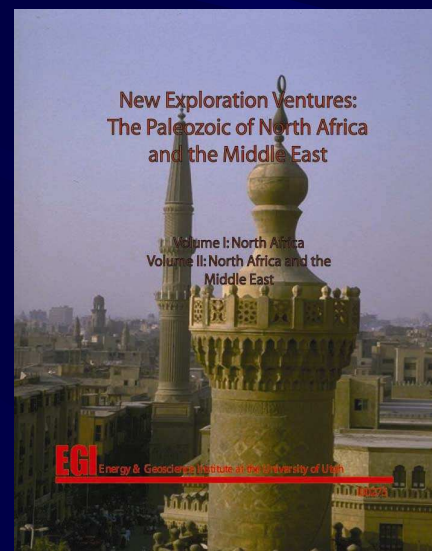
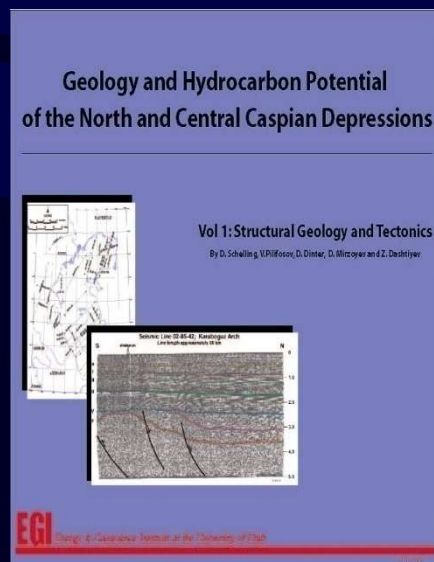
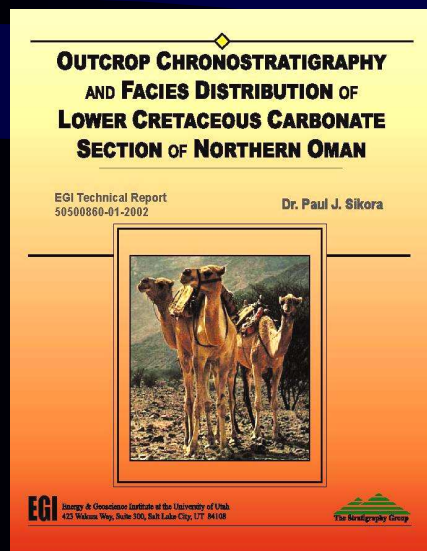
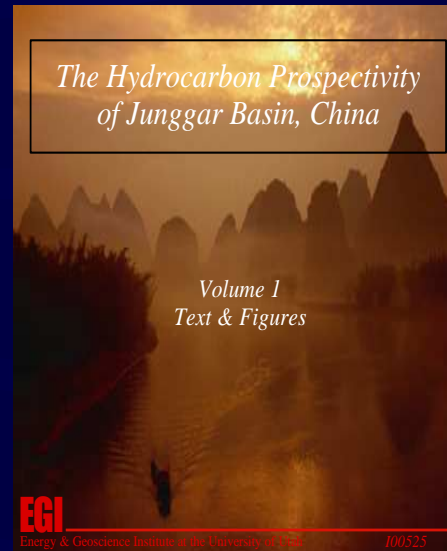
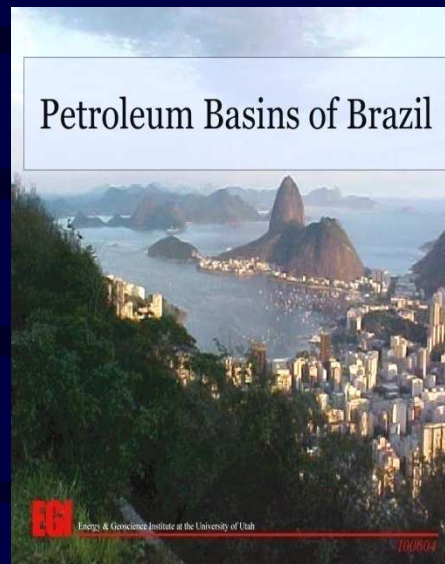
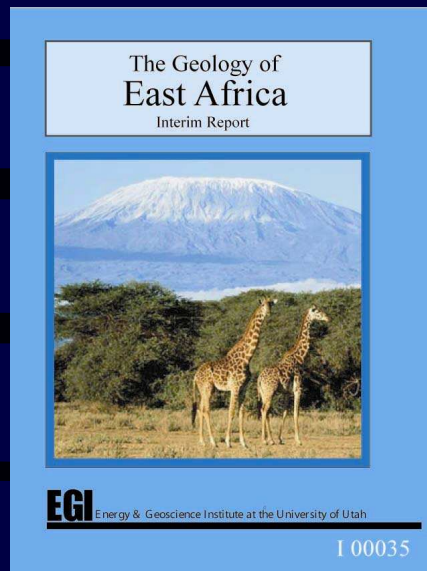
In 39 Countries in 2006 - 2008

EGI Global Database & Library

- *570 EGI Reports - 62 Countries*
- EGI Research Studies (Access for the members only)



Examples of 570+ EGI Reports



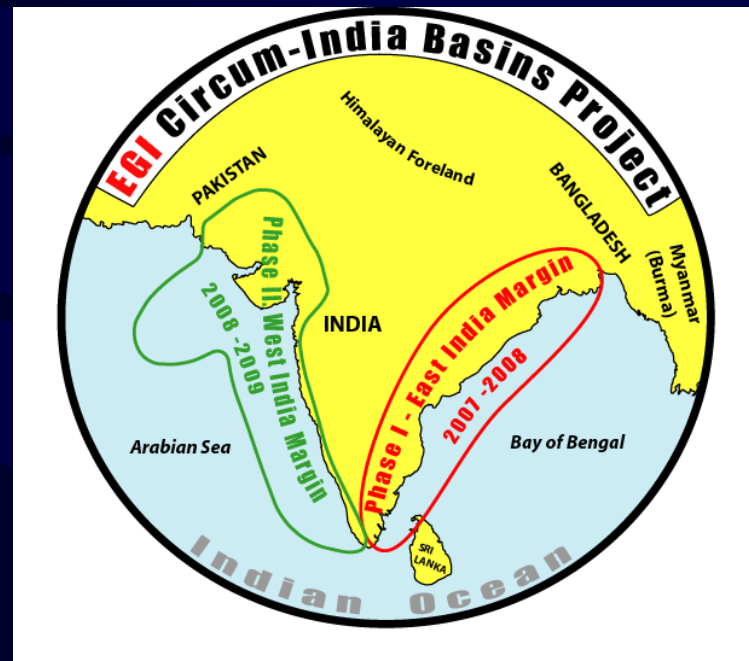
EGI In India

- Over 10 years ago India's National Oil Company requested EGI to teach their staff in Utah
- EGI has had 3 Companies from India:
Reliance Industries, Oil India, ONGC
- EGI has been requested to assist in the biggest gas discoveries of 21st century in East Margin India
- EGI has MOU with DGH India (equal to USA MMS)
- EGI participated in Gov. Huntsman Trade & Educational Mission in 2007
- Direct result was ONGC joined EGI Program and supports EGI Research
- **EGI** is conducting research on India for 11 companies

ARC-GIS Circum-India Basins Project

Phase I – East India Margin (2007-08)

Phase II – West India Margin (2008-09)



Principal Investigators:

Dr. Sudeep Kanungo & Dr. Rasoul Sorkhabi

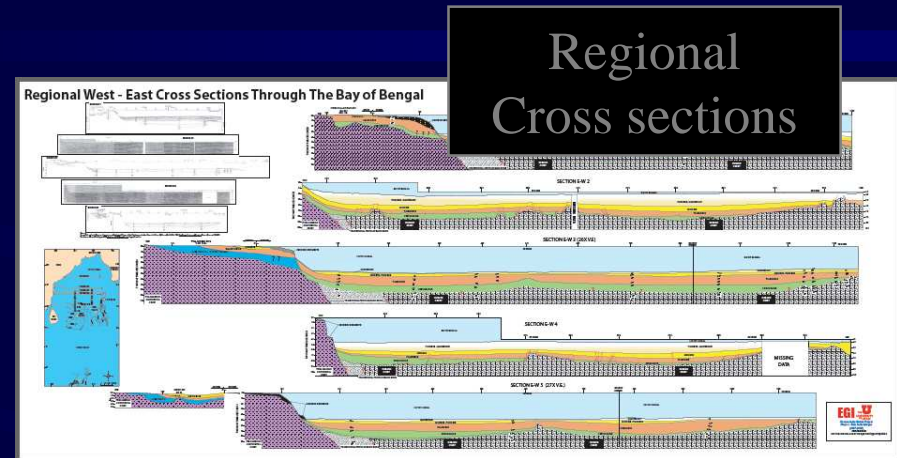
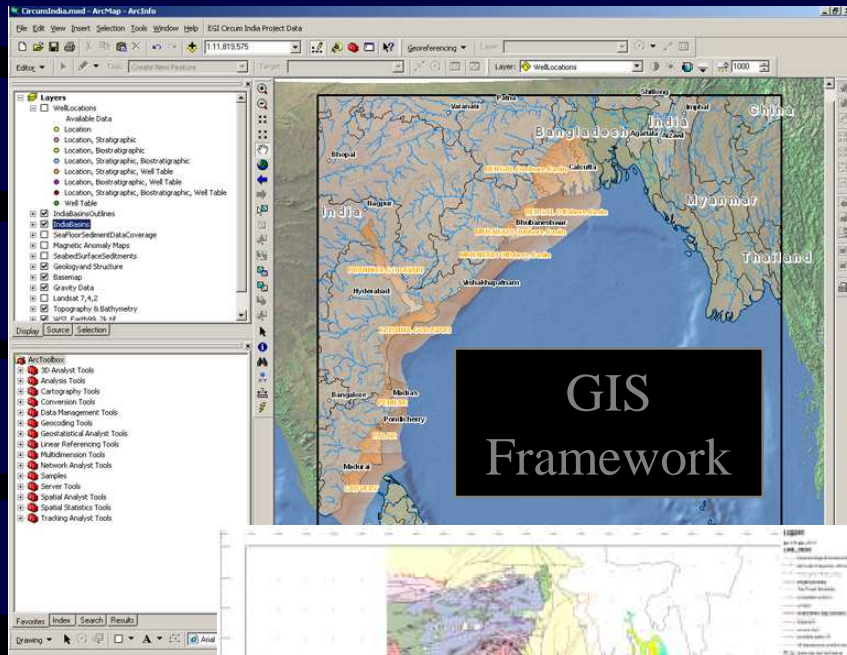
EGI

Sponsoring Companies

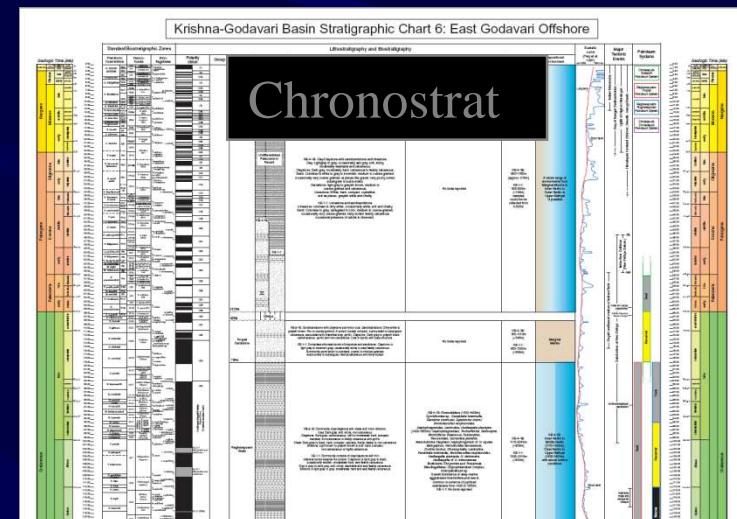
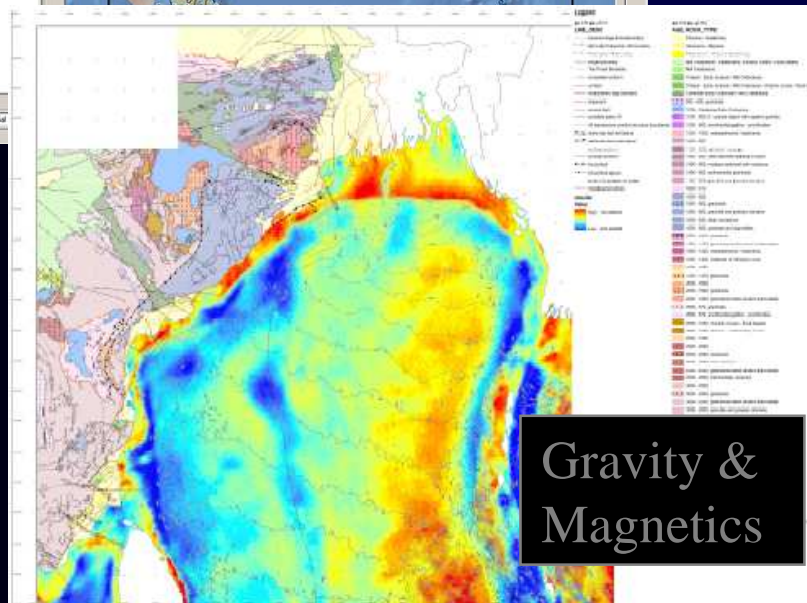


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Regional Example: India East Margin (Funded by 11 companies)

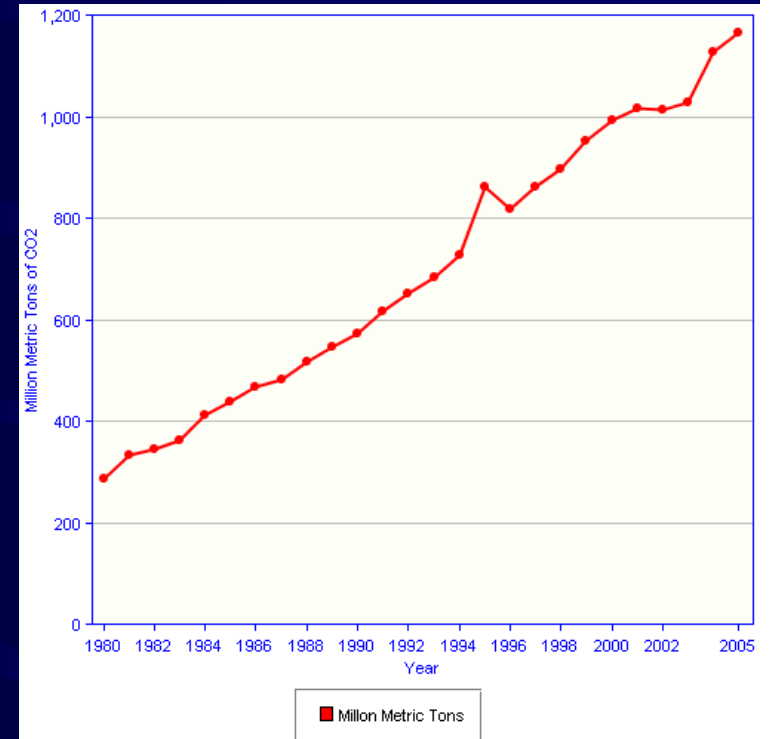


EGI



EGI Opportunities in India for Carbon Management

- Coal - Major Source of feedstock for electricity generation in India
- India and China will emerge as significant GHG contributors
- EGI has contributed to a report on carbon sequestration through IRADe
- Looking at forging research & industry partnerships in the near term



EGI



EGI signed MOU with India DGH (Feb. 2008)

**Dr. Rasoul
Sorkhabi**
EGI Scientist

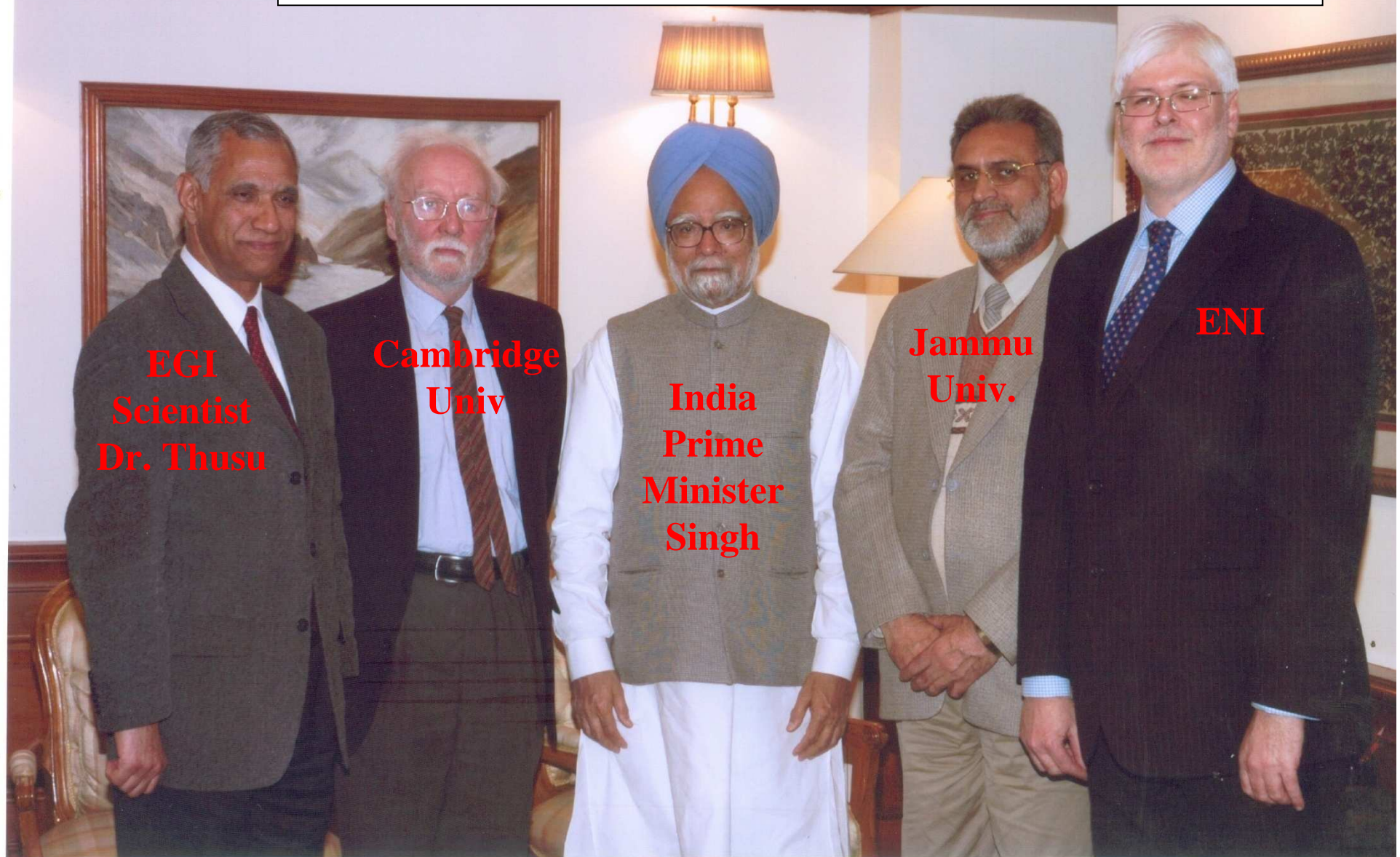
Mr. V.K. Sibal
Director India DGH

Dr. Sudeep Kanungo
EGI Scientist



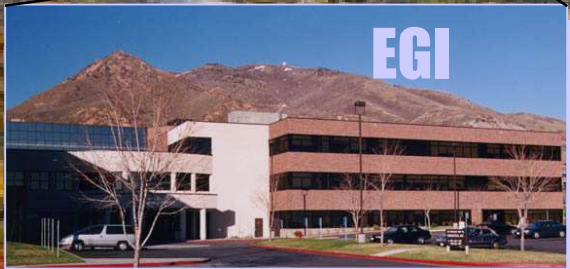
EG

EGI Meeting India Prime Minister - Feb. 2008



Last Overview Slide

University of Utah
Ranked in top 10% World



EGI

EGI...the science to find energy

Dr. Raymond A. Levey - EGI
Director